

The Effect of the Calcining Temperature on the Amount
of Surface and Water Content of Aluminium and Magnesium
Oxides, by G. K. Borekov, V. A. Dzis'ko, M. S. Borisov
8 pp.

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Sci Tr Center RT-3657

Scientific + Chemistry

Jun 56/dan

An Investigation of the Mechanical Properties of
Crystalline Polymers. II. Polyethylenes, by V.A.
Kargin, N. I. Bogolova, 15 pp.

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pp. 1208-1212

SLA R-2775

Sci

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The Investigation of the Mechanical Properties
of Crystalline Polymers. III. Copolymers of
Vinyl Chloride with Vinylidene Chloride and
Gutta-Percha, by V. A. Margan, T. I. Sogolova.

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1953, pp 1213-1216.

T.I.L. T. 4525

Sci - Chemistry, *Rubier* 35, 716

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Markova.

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1953, 1236-1240.

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Sci - Chemistry

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Co - 29 Jan 1955

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pp 1362-1369.

Def Sci Info Sv
DIB T.157.R.

Scientific - Physics

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Investigation of Cathodic Processes in the
Electrodeposition of Copper From Complex
Electrolytes, by E. A. Ukshe, A. I. Levin.

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1953, pp 1356-1403.

Consultants Customs Tr
682-204B
\$42.00

Sci - Chem, Electron

Mar 59

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AID/Feb 57

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On New Experimental Confirmations of Our Theory of
Heat Capacity of Chain and Stratified Structures,
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RUSSIAN, per, Zhur Fiz Khim, No 9, 1953, pp 1430-1436.

NLL(LOAN)Ref: 5828.4 1953 (5443)

Sci-Chem
April 64

Measurement of Real Vapor Pressures at Elevated
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the Components in the System Ag — Pt, by
A. A. Granovskaya, A. P. Lyuzinov, 9 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XVII,
1953, pp 1437-1442.

AEC Tr 2495

AEC-Tr-6003 (9213562)

Sci. - Chemistry

Jul. 1956

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Components in the Iron/Phosphorous System, by
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Sci Mus Lib - 56/0287

Sci - Chemistry, Minerals/Metals,

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CIA-PDD X-2121

Some Rules for Plotting Phase & Diagrams of
Binary Systems, by S. D. Grossakov, L. M.
Grossakova, 15 pp.

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pp 1545-1555.

AEC Tr-4289

Sci - Chem, Phys
21 Feb 61

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Investigation of the Inflammability Conditions
of Gas Mixtures. Part XXIII. Oxidation of Ethane,
by N. I. Gerber, M. B. Neiman.

RUSSIAN, no per, Zhur Fiz Khim, USSR, Vol XXVII,
No 10, 1953, pp 1572-1579.

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Scientific - Physics

Transfer and Distribution of Metal Alloy^s in an
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Moscow, Oct 1953, pp 1586-1591.

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Sci - Physics
May 58

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Investigation of Conditions of Inflammability
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of Propane, by M. I. Gerber, M. B. Neyman (Neuman),
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USCR, 1953, pp 1617-1621.

Navy Tr 1227/IRL 529

Scientific - ~~XXXXXXXXXX~~
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CTB 73/Oct 55

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Investigation of Conditions of Inflammability of
Gas Mixtures, Part XXV. Investigation of the
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Rulnevskiy, 9 pp.

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USSR, 1953, pp 1622-1630.

Navy Tr 1223/IRL 530

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CIB 73/Oct 55

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Solution, by S. I. Drakin, E. M. Yakushevskiy. 9 pp
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pp 1636-1641,

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Scientific - Chemistry

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Expansion of Anthracene, by V. M. Kozhin,
A. I. Kizygorodskiy, 10 pp.

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Sci Res Lib - 56/0294

Natl Res Lib - TT-566

Sci - Physics, Chemistry

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Adsorption of Electrolytic Zinc Deposits to Iron, by
K. M. Gorbunova, P. D. Dankov, 2100 words.

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pp 1725-1730.

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\$4.20

Scientific - Minerals/metals

26, 721

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Stepukhovich, A. D. and Tschalkin, A. M.
KINETICS AND MECHANISM OF HYDROCARBON
DECOMPOSITION. III. KINETICS AND MECHANISM
OF BUTANE AT LOW PRESSURES IN PRESENCE OF
ISOBUTYLENE AND PROPYLENE AS RETARDANTS.
[1962] 10p. (figs. tables formulae refs. omitted).
Order from OTS or SLA \$1.10 62-20340

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1953,
v. 27, no. 12, p. 1737-1747.

DESCRIPTORS: *Hydrocarbons, Decomposition,
*Butane, *Propenes, Reaction kinetics, Chemical
reactions, Inhibition.

See also 62-14856.

(Chemistry--Organic, TT, v. 9, no. 12)

62-20340

I. Stepukhovich, A. D.
II. Tschalkin, A. M.
III. Title: Kinetics...

Office of Technical Services

Reducing Action of Hydrogen and Carbon
Monoxide upon Iron Oxides at Low Temperatures,
by A. N. Kuznetsov,

RUSSIAN, *Epr*, Zhur Fiz Khim, Vol XXVII, No 12,
1953, pp 1808-1817.

Butcher Tr No 3300

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Scientific - ~~Ministry~~ Chemistry

Separation of Hydrocarbon Mixtures by the
Chromothermographic Method, by N. M. Turkel'taub.

RUSSIAN, no per, Zhur Fiz Khim, Vol. XXVII,
1953, pp 1827-1836.

Assoc Tech Sv RJ-223
\$18.00

Scientific - Chemistry
OTS 73/Oct 1955

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61-19600

Gorlashev, S. V. and Mindovitch, Ye. Ya.
 ETUDE DES EQUILIBRES DE PARTAGE DE L'ACIDE
 PICTRIQUE ENTRE L'EAU ET LE NITROBENZENE. I.
 tr. by M. Vinogradoff. 13 Dec 60 [11] p. 3 refs. CIA
 Trans. no. R 1100.
 Order from OTS or SLA \$1.60

61-19600

Trans. in French of Zhurnal Fizicheskoy Khimii
 (USSR) 1960, v. 34, p. 1837-1841.

DESCRIPTORS: *Chemical equilibrium, *Picric acid,
 *Water, *Nitrobenzenes, Benzenes

I. Gorlashev, S. V.
 II. Mindovitch, Ye. Ya.
 III. CEA-tr-R1105
 IV. Commissariat d'Energie
 Atomique (France)

17528

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(Chemistry--Physical, TT, v. 6, no. 3)

61-23754

Gorbachev, S. V. and Mindovich, E. Ya.
ETUDE DES EQUILIBRES DE PARTAGE DE L'ACIDE
PICRIQUE ENTRE L'EAU ET LE NITROBENZENE.
II (Study of the Equilibria of Distribution of Picric
Acid Between Water and Nitrobenzene) tr. by
M. Vinogradoff. 27 Oct 59 [9]p. 8 refs. no. R 751
(text in French).

Order from OTS of SLA \$1.10

61-23754

Trans. in French of Zhurnal Fizicheskoi Khimii
(USSR) 1953, v. 27, no. 12, p. 1842-1847.

DESCRIPTION: "Chemical equilibrium, "Picric acid,
"Water, "Nitrobenzenes, Benzene.

See also 61-19600

(Chemistry--Physical, TT, v. 6, no. 7)

- I. Gorbachev, S. V.
- II. Mindovich, E. Ya.
- III. CEA-tr-R751
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l'Energie Atomique
(France)

Office of Technical Services

TT-64-140

Delinarski, Yu. K., Markov, B. F., and
 Berenblyum, L. S.
 DETERMINATION OF COEFFICIENTS OF DIFFUSION
 OF IONS IN MOLTEN SALTS. (1963) 15p (figs
 omitted) 8 refs
 Order from OTS, S.A., or KTC 51.60 TT-64-14017

I. Delinarski, Yu. K.
 II. Markov, B. F.
 III. Berenblyum, L. S.

Trans. of Zhurnal Khimicheskoi Fiziki (USSR) 1963,
 v. 37, no. 12, p. 1848-1855. (Abstract available)

DESCRIPTORS: *Electrochemistry, *Fused materials,
 Salts, Ions, *Silver, Diffusion, Potassium compounds,
 Sodium compounds, Lithium compounds, Chlorides,
 Nitrates,

A method for determining the coefficients of diffusion of
 ions in molten salts, based on measuring the decrease
 in current with time on a plane-rod electrode, is
 proposed. Up to a certain time after the instant of con-
 (Chemistry-Physical TT, v. 11, no. 11) (over)

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A method for the Analysis of Microscopic
Quantities of Heavy Water, by R. H. Mardaleishvili,
et al. UNCL

RUSSIAN, per, in Zhurn-Fiz Khim, Vol XXVII, No 12,
1953, pp 2195-2198.

OCT-62TB

Sci - Chem
Sep 59

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Electrical Properties of Films of Condensed
Aromatic Hydrocarbons on Aqueous Solutions
of Inorganic Salts, by M. A. Garovich, O. G.

Ol'man.

RUSSIAN, per, Zhur Fiz Khim, Vol 28, No 1,
1954, pp 19-25.

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Sci - Chemistry
May 67

Yatsimirskii, K. B. and Shutov, A. A.
THE THERMOCHEMISTRY OF SOME IODIDE COM-
PLEXES. 10p. 6 refs. MTWL: 749.
Order from OTS or ETC \$1.55

61-17269

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1954
v. 28, no. 1, p. 30-35.

DESCRIPTORS: Iodides, Complex compounds,
*Thermochemistry, Chemical equilibrium.

61-17269

I. Yatsimirskii, K. B.
II. Shutov, A. A.
III. MTWL-749
IV. Stichting Moedijk
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pelijke Literatuur

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Kinetics of the Dark Reaction of a
Hydrochloride Mixture and Critical
Conditions for Its Combustion, by
A. I. Rozlovskiy.

RUSSIAN, per, Zhurnal Fizicheskoy
Khimiy, 1954, Vol 28, No 1, pp 51-59.
ML RPS 23/6 (On Loan or Purchase)

CFST I # 65-6 0347

Aug 65

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Exchanges With RS Groups in Polysulfides, by
T. M. Guryanova, V. M. Vasil'evn,

RUSSIAN, per, Zhur Fiz Khim, Vol XXVIII, No 1,
1954, pp 60-66.

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Co-op Tr Sch. No 11
Ld. 65 (7c. 04.)

Scientific-Chemistry

May 55 CTS

Certain Exchange Reactions of Sulphur, by
H. H. Gur'yancova, 5 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVIII, No 1,
1954, pp 67-72.

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Sci - Chem
May 57 CTS/cex

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Formation of Silver Bromide Complexes in
Solutions, by K. S. Lyalikov, V. N. Piskunova.
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ALL REF: S828.4 1964 (10,49c) (loan copy)

OTS T-64-10910

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Calculation of the Heats of Formation of Inorganic
Compounds, by V. V. Vozin, 8 pp.

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SLA R-2149

Sci

Jul 59

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Mechanism of the Oxidation of Hydrocarbons
in Gaseous Phase, IV. High and Low-Temperature
Oxidation of Propane, by N. Ya. Chernyak, et al.
25 pp.

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Sci Trans Center RA-3314

Scientific - Chemistry

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Apr 56

Temperature Effect at the Cathode During
Electro-Precipitation of Powderous Cadmium,
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RUSSIAN, per, Zhur Fiz Khim, Vol XXVIII, 1951,
pp 256-264.
CIA/FDD X-5668

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S-1 - Elec

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TT-64-14400

Protsenko, P. I. and Popovskaya, N. P.
ELECTRICAL CONDUCTIVITY OF THE BINARY
SYSTEMS: CADMIUM NITRATE-POTASSIUM NITRATE,
CADMIUM NITRATE-RUBIDIUM NITRATE AND
CADMIUM NITRATE-SILVER NITRATE IN FUSIONS
[Elektricheskiye i binarnyye Sistemy: Nitrat Kadmia-
Nitrat Kal'ya, Nitrat Kadmia-Nitrat Rubidiya i Nitrat
Kadmia-Nitrat Serebra v Rasplavakh]. [1963] [15p]
(figs omitted) Refs.
Order from OTC, S.A., or ETC \$1.40 TT-64-14400

I. Protsenko, P. I.
II. Popovskaya, N. P.
III. RT-2571

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1934,
v. 28 (no. 2) p. 299-304.
Another trans. is available from S.A. as RT-2571. 17p.

DESCRIPTORS: *Purest materials, Salts, *Cadmium
compounds, *Potassium compounds, *Rubidium com-
pounds, *Silver compounds, *Nitrates, Electrical
conductivity.

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(Chemistry--Physics), TT, v. 11, no. 10) (over)

Solution and Adsorption of Hydrogen by Dispersed
Palladium-Silver Alloys, by Zh. L. Vert, I. P.
Izardovskiy, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, USSR, 1954, Vol XXVIII,
No 2, pp 317-327.

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Sci - Chem
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Impact of Anions on the Temperature Effect
on the Cathode During Electro-Precipitation of
Powderous Metals, by D. N. Gritsan,
A. M. Bulgakova, 13 pp.
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1954, pp 337-344,
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Sci - M/14
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Thermodynamic Studies at Low Temperatures. I. Measurement of Temperatures Between 12 and 300°K, by P. G. Strelkov, A. B. Borovik-Romanov, M. P. Orlova, 15 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVIII, 1954, pp 345-352.

AEC Tr 1229

Sci - Physics
Jun 53

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Mechanism of Gas Phase Oxidation of Hydrocarbons.
V. Cold Flame Oxidation of Propane, by L. A. Ropa,
T. Ya Shvach, 15 pp.

RUSSIAN, no par, Khim Fiz Khim, Vol. XXVIII, No 3,
1991, pp 614-621.

Sol Trans Center R# 3181

Scientific - Chemistry

Feb 56

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3-5130

(IR-2539)

Two Types of Homopolar Bonds in Chemical
Adsorption, by F. P. Vol'monshteyn, 16 pp.

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No 3, 1954, pp 492-492.

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Sol - Chem
Jun 59

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THE EFFECT OF TEMPERATURE ON THE LOWER
CONCENTRATION LIMIT OF FLAME PROPAGATION, BY
M. A. PESHKIN.

RUSSIAN, PER, ZHUR FIZ KHIM, VOL XXVIII,
1954, PP 433, 434.

NLL M. 3869

SCI - PHYS

OCT 62

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On the Relationship Between the Corrosion Rate of
Iron and pH of (KCl) Salt Solution, by L. K. Lepin,
A. Ya. Vaynshtein.

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RUSSIAN, no per, Zhur Fiz Khim, Vol XXVIII, No 3,
1954, pp 435-439. *435/*

Navy Tr 1531/NRL 633

Sci - Chem

Oct 57

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SLA R-2000

The Oxidation of Iron and Steel at High Temperatures,
by N. P. Zhuk, B. V. Linchevskiy.
RUSSIAN, per, Zhur Fiz Kain, Vol XXVIII, No 3,
1954, pp 440-452.
BIR:1 3785

Sci - Engr
Sep 54

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Thermodynamic Studies at Low Temperatures, II.
Measurements of the Heat Capacity of Solid Bodies
and Liquids Between 12 and 300°K, by I. G.
Strelkov, M. S. Itskovitch, V. N. Kostukov, G. G.
Mirskeya, E. N. Samoilov, 21 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVIII, 1954,
pp 459-472.

AEC Tr 3266

Sci - Chem

Sep 58

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61-19802

Kalist, T. V. and Franklin, A. N.
 THE EFFECT OF THE ADSORPTION OF ANIONS ON
 THE REDUCTION OF THE SO_4^{2-} ION AT A DROP-
 PING CATHODE (Vliyaniye Adsorptsii Anionov na
 Vol'nnoyevye Iona SO_4^{2-} na Kapel'nom Katode).
 Apr 61 [14] p. 31 no. 1. RTS 1747.
 Order from OTS or SLA \$2.60

61-19802

Trans. of Journal Fizicheskoy Khimii (USSR) 1954,
 v. 28, no. 3, p. 548-549.

DESCRIPTORS: Ions. Reduction. *Electrolysis.
 *Peroxyisulfates. Adsorption.

The electroreduction of SO_4^{2-} ions at a mercury elec-
 trode is retarded by adsorbing anions. The rate of this
 reaction at a positively charged surface depending on
 the nature of the indifferent electrolyte, follows the
 order $\text{NO}_3^- > \text{Cl}^- > \text{KBr} > \text{KI}$. In passing from
 0.01 N H_2SO_4 to 0.01 N KI , for this reaction, provided
 the respective current density is 0.8 of the limiting re-
 (Chemistry - Physical) TT, v. 6, no. 4) (over)

I. Kalist, T. V.
 II. Franklin, A. N.
 III. RTS-1747
 IV. Department of Scientific
 and Industrial Research
 (Gr. Brit.)

177692

Office of Technical Services

Retarding Effect of Gaseous Reaction Products
on the Rate of Reduction of Iron Oxides With
Hydrogen and Carbon Monoxide, by G. I. Chufarov,
et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVIII, No 3,
1958, pp 490-497.

DSIR ILLU M.1549

Sci - Chem

Sep 60

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Characteristic Frequencies of Alkenes, by
F. F. Grudev, 7 pp.

RUSSIAN, no par, Zhur Fiz Khim, Vol XXVIII,
No 3, 1954, pp 518-519.

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Scientific - Chemistry

Dec 54 CTS

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Low Temperature Thermodynamic Investigations.
3. Heat Capacity of Potassium Chloride Between 12
and 300°K. Entropy of Potassium Chloride at 298.16°K
by P. G. Strelkov, E. S. Itzkevich, V. N. Kostyukov,
G. G. Murskaya, 11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVIII, No 4, 1954,
pp 645-649.

Sci Man Lib Tr 57/3675

Sci - Physics
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SLA R-2007

On the Theory of Nickel-Arsenide Structures, by
by V. A. Zhdanov, M. S. Tekhay, 4 pp.

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1954, pp 688-691.

RT 4602-
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AE 1 E 489

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Scientific - Physics

Jul 55 CIB

Investigations in the Field of Rotational
Isomerism. II. Rotational Isomerism in
Isoprene, by V. N. Il'kitin, T. V. Yankovleva,
64 pp.

RUSSIAN, per, Zhur. Fiz. Khim., Vol XXVIII,
No 4, 1954, pp 697-699.

SLA 60-161834

Sci
Vol. IV, No 7
Apr 62

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Investigation of the Thermodynamic Properties
of Binary Metallic Systems Using Electromotive
Forces, ~~1954~~ Cd-Bi, by A. V. Nokol'skaya, Ya. I.
Gerasimov.

RUSSIAN, no per, Zhur Fiz Khim, Vol ² XXVIII,
No 4, 1954, pp 713-720.

T.I.L. T.4551

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Sci - Physics, Chemistry

Jun 1958

Process of Electrochemical Liberation of Oxygen
on Nickel, by L. M. Elina, T. I. Borisova, Ts. I.
Zalkind. UNCLASSIFIED

RUSSIAN, per, Zhur Fiz Khim SSSR, Vol XXVIII,
No 5, 1951, pp 784-796.

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Scientific - Chemistry

Jan 55 CTE/DEX

Investigations of the Domain of Radical Reaction Mechanism. III. Decomposition of Benzoyl Peroxide and its p,p'-dinitro- and p,p'-dimethoxy- Derivatives in Benzene and Nitrobenzene, by A. I. Milyushinskaya, Kh. S. Bagdasaryan.

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DSIR LLJ M.1514
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Sci - Chem

Oct. 60

Electrochemical Behavior of Iron in Hot Concentrated
Alkali Solutions. Part I, by V.V. Losev, B.N. Kabanov.

RUSSIAN, part, Zhur Fiz Khim, Vol XXVIII, No 5, 1954,
pp 824-836. 158, 073

NRL Tr No 848

Sci - Mln/Mrt
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The Photoconductivity of Dyed Organic Film
When Exposed to Visible Light, by A. T.
Vertanjan, I. A. Karpovich, 19 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVIII, No 5,
1954, pp 856-864.

NRC C-3121

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Nov 60

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Reduction of Nickel by Hypophosphite. I.
Formation Conditions and Some Plating Properties.
II. Problem of the Reaction Mechanism, 21 pp.
K.M. Dzhuravskiy, R.P. Nikiforov
RUSSIAN, per, Zhur Fiz Khim, Vol XXVIII, 1954,
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ABC Tr 2921

Sci - Chemistry
Jun 57

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PSM 11/130
SLB R-452

Mechanism of Gas Phase Oxidation of Hydrocarbons:
7. Effect of Homogeneous Additions (NO_2, Br_2)
on the Oxidation of Propane, by A. P. Revzin,
G. B. Samoylov, G. B. Sergeyev, V. Ya. Shtern,

RUSSIAN, no per, Zhur Fiz Khim, Vol XXVIII, No 6,
1954, pp 985-996.

R.A.E. Farnborough
Tr 514

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Scientific - Physics, Chemistry

Jul 55 CTS

E-5121

(EX-2561)

Sorption Dynamics of Two Components of a Mixture,
by Ya. M. Bilsen, 13 pp.

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JPIS L-777-H

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Jan 55

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The Problem of the Solubility of Boron and Carbon in
Boron Carbide $B_{12}C_3(B_4C)$, by G. S. Zhdanov, G. A.
Merson, N. M. Zhuraveyov, O. V. Samsonov.

RUSSIAN, no per, Zhur Fiz, Khim, Vol XXVIII, 1954,
pp 1076-1080. CIA 9519478

SLA R-1117
REC Tr 3074

Sci - Chem

Nov 57

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Vol LXXVIII, No 6, Jun 1954, pp 1161-1163.
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AP 62522

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